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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

DAILEY, THOMAS J

ART UNIT

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2452

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/618,667	Applicant(s) LE LEANNEC ET AL.	
	Examiner Thomas J. Dailey	Art Unit 2452	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-27, 29-36, 39, 40 and 43-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-27, 29-36, 39, 40 and 43-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 45-50 were added by the amendment filed on 1/29/2009.
2. Claims 1-10, 12-27, 29-36, 39, 40 and 43-50 are pending.

Response to Arguments

3. The claim objections have been withdrawn in view of the applicant's entered amendments and remarks.
4. Applicant's arguments filed January 29, 2009 with respect to the prior art rejections of the claims have been fully considered but they are not persuasive.
5. The applicant argues with respect to claim 1 that Boliek (US Pub. No. 2003/0018818) fails to disclose that when a pointer marker is not present in the header, the pointer marker is formed in the signal prior to processing the request.
6. The examiner disagrees. In [0033], Boliek discloses, "There is a main header at the beginning of the codestream. This header contains makers that describe the image characteristics and the coding style and other parameters that apply to the whole image or individual components." This codestream is located at the server (second apparatus) and is requested by a client (first apparatus) ([0039]). This codestream is necessarily stored at the server before the client requests it, and

therefore the markers contained in the main header are formed prior to the processing of a client's (first apparatus) request.

Further, as the pointer markers are in fact present in Boliek, it reads on the claim language because the pointer markers are necessarily formed if they are not present.

The examiner also notes, although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). That is, in this particular instance the applicant has pointed to Fig. 3 and page 18, lines 4-15 which additionally recite a determination step (i.e. it is determined whether or not the TLM pointer marker is present). Boliek may not disclose this determinative step, but given the present claim language, Boliek still teaches the claimed invention, because the claim broadly requires that if no pointer marker is present it is formed without the need of determining if it present or not. That is, the pointer markers can simply be formed along with the rest of the codestream, as appears to be the case in Boliek, and not in a subsequent step.

7. The applicant further argues with respect to claim 12 that Boliek fails to disclose "determining a position at which the at least one data packet of the received portion is to be inserted into the body of a compressed digital signal derived from the compressed digital signal present in the second apparatus and which is

capable of containing all or part of the body of this compressed digital signal, the derived signal also comprising header data, *the position being determined as a function of the length of the header data* and of at least one pointer marker previously received and inserted into the header data of the derived signal by the first apparatus, the at least one pointer marker providing information for calculating the length of the part of the body preceding the at least one data packet of the received portion," and "inserting into the body of the derived signal the at least one data packet of the received portion at the determined position."

8. The examiner disagrees and notes in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Specifically, claim 12 was rejected over Boliek in view of what was well known in the art and the examiner pointed out that Boliek may not explicitly disclose the position being determined as a function of the length of the header data.

Therefore, the examiner maintains Boliek discloses determining a position at which the at least one data packet of the received portion is to be inserted into the body of a compressed digital signal ([0045], data packets are received from the server and inserted to create a correct JPEG 2000 codestream, this is done piecemeal, i.e. one received portion at a time) derived from the compressed

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digital signal present in the second apparatus ([0039], original codestream (compressed digital signal) is stored at server (second apparatus)) and which is capable of containing all or part of the body of this compressed digital signal ([0045], data packets are received from the server and inserted to create a correct JPEG 2000 codestream), the derived signal also comprising header data ([0052], main header), the position being determined as a function of at least one pointer marker previously received and inserted into header data of the signal by the first apparatus ([0052], once main header data, which includes markers is received, positions of every data packet and therefore their insertion point are known; [0059] further illustrates this process), the at least one pointer marker providing information for calculating the length of the part of the body preceding the at least one data packet of the received portion ([0052] and [0057] further illustrating this process) and

inserting into the body of the derived signal said at least one data packet of the received portion at the determined position ([0045]).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-10, 12-27, 29-36, 39-40, and 43-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over (US Pub. No. 2003/0018818), hereafter "Boliek" in view of what is well known in the art.

11. As to claim 1, Boliek discloses a method of processing a request coming from a first communication apparatus connected through a communication network to a remote second communication apparatus, the method being implemented in the second apparatus (Abstract), the method comprising the steps of:

receiving the request, wherein the request is for obtaining digital data of a compressed digital signal that comprises header data and a signal body comprising data packets ([0039] and [0033] discloses that the codestream (digital data) comprises a main header and tiles that make up the signal body; client (first apparatus) requests all or portion of code stream (digital data) from server (second apparatus));

processing the request including determining a position, in the body of the signal, of at least one data packet corresponding to the request ([0043], the client request specific ranges of bytes in the codestream using the starting point in memory, i.e. the position in the body of the codestream, thus when the server processes the incoming request it determines the position in the body of the signal of corresponding data packets); and

forming prior to processing, the at least one pointer marker in the signal when at least one pointer marker providing information for calculating the length of the part of the signal body is not present in the header ([0033], header contains markers that describe the image characteristics that apply to the whole image or individual components and the codestream is located at the server (second apparatus) and is requested by a client (first apparatus) as disclosed in [0039]; as the pointer markers are in fact present the Boliek disclosure, it reads on the claim language because the pointer markers are necessarily formed if they are not present).

However, Boliek may not explicitly disclose that the position is determined as a function of the length of the header data and of at least one pointer marker present in the header data of the signal, the at least one pointer marker providing information for calculating the length of the part of the body preceding the data packet under consideration. Boliek does disclose the request indicates the position of the data packets in memory ([0043]), but does not disclose what the memory locations are relative to (e.g. the server or the codestream). However, one of ordinary skill in the art would with it as obvious to use either memory locations relative to the server or to the codestream as this is a common practice in the art when requesting data (i.e. requesting data based on its location relative to the memory of the sending device or its location relative to the transmitting stream of data). As Boliek has disclosed the structure of a codestream (Fig. 4

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and [0057]) and the functions of header data ([0033]) and pointer markers ([0052]), simply having the request indicate the position of a data packet relative to the codestream would make that position of a function of the length of the header data and of at least one pointer marker present in the header data of the signal. Therefore it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to use memory locations relative to the codestream in the request to simplify the retrieval procedure of requested data packets.

12. As to claim 12, Boliek discloses a method of processing compressed digital data received by a first communication apparatus connected through a communication network to a remote second communication apparatus, the method being implemented in the first communication apparatus, (Abstract), the method comprising the steps of:

receiving only a portion of a compressed digital signal present in the second apparatus and comprising a body that comprises data packets, the received portion comprising at least one data packet ([0042], lines 5-12, client (first apparatus) requests an image (compressed digital signal) from a server(second apparatus); client receives and orders the codestream piecemeal, i.e. one received portion at a time, [0045]):

determining a position at which the at least one data packet of the received portion is to be inserted into the body of a compressed digital signal ([0045], data

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packets are received from the server and inserted to create a correct JPEG 2000 codestream, this is done piecemeal, i.e. one received portion at a time) derived from the compressed digital signal present in the second apparatus ([0039], original codestream (compressed digital signal) is stored at server (second apparatus)) and which is capable of containing all or part of the body of this compressed digital signal ([0045], data packets are received from the server and inserted to create a correct JPEG 2000 codestream), the derived signal also comprising header data ([0052], main header), the position being determined as a function of at least one pointer marker previously received and inserted into header data of the signal by the first apparatus ([0052], once main header data, which includes markers is received, positions of every data packet and therefore their insertion point are known; [0059] further illustrates this process), the at least one pointer marker providing information for calculating the length of the part of the body preceding the at least one data packet of the received portion ([0052] and [0057] further illustrating this process) and

inserting into the body of the derived signal said at least one data packet of the received portion at the determined position ([0045]).

However, Boliek may not explicitly disclose the position being determined as a function of the length of the header data. But, since Boliek does disclose pointer markers indicating the length and starting point of every packet in the codestream ([0052]), simply making the insertion position a function of the length

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of the header data is an obvious and unsubstantially modification of Boliek to one of ordinary skill in the art as the pointer markers can accomplish this alone.

13. As to claims 23, 39, and 43, they are rejected by the same rationale set forth in claim 1's rejection.

14. As to claims 29, 40, and 44, they are rejected by the same rationale set forth in claim 12's rejection.

15. As to claims 2 and 24, Boliek discloses the determination of the length of the part of the body of the signal preceding the data packet under consideration comprises a preliminary step of determining the order of appearance of the data packet in the body of the signal, according to parameters relating to structure and organization of the data in the signal ([0033], lines 6-11).

16. As to claim 3, 14, 25, and 31, Boliek discloses the compressed digital signal is partitioned into a number n of independently compressed regions $t_{sub.i}$, $i=1$ to n and $n \geq 1$, the body of the signal comprising, for each region, region header data and a region body containing data packets of the region under consideration ([0033], tile-parts are the independently compressed regions and each tile-part has a header and body).

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17. As to claims 4, 15, 26, and 32 Boliek discloses the length of the part of the body of the signal preceding the data packet under consideration is determined from:

at least one pointer marker PLT providing information for calculating the length of the data packet or packets preceding the data packet under consideration in the region where this packet is located ([0052]),

the length of the header data of the region where the packet under consideration is located and, when one or more regions precede the region where the packet under consideration is located ([0052]).

at least one pointer marker TLM providing information for calculating particular the length of the preceding region or regions ([0052]).

18. As to claims 5 and 16, Boliek discloses the pointer marker TLM providing information for calculating the length of each region $t.sub.i$ is present in the header data ([0052] and [0060]).

19. As to claims 6 and 17, Boliek discloses the pointer marker PLT providing information for calculating the length of the data packets in a region $t.sub.i$ is present in the header data of the region concerned ([0052]) and [0061]).

20. As to claims 7 and 27, Boliek discloses extracting and transmitting to the first communication apparatus the at least one data packet having a position that has been determined ([0043]).

21. As to claim 8, Boliek discloses the request for obtaining digital data specifies at least one data packet of the signal ([0043]).

22. As to claim 9, Boliek discloses the request for obtaining digital data specifies part of the signal ([0043]).

23. As to claim 10, Boliek discloses subsequent to the request being received, the method comprises a step of identifying the data packet or packets necessary for the reconstruction of the part of the signal specified ([0042]).

24. As to claim 13 and 30, Boliek discloses:

receiving the header data coming from the original compressed digital signal present in the second apparatus, the received header data comprising at least one pointer marker TLM providing information for calculating the length of the body of the original signal ([0033] and [0042], lines 5-12),

forming, from the received header data, the derived compressed digital signal which thus comprises, as header data, the received header data and a signal body of length equal to that of the body of the original signal ([0045]), the body of the derived signal representing a space initially filled with arbitrary data and which is intended to contain the data packet or packets received from the second apparatus ([0045]).

25. As to claims 18 and 33, Boliek discloses:

receiving region header data ([0033] and [0042], lines 5-12),;
determining a position at which the received region header data is to be inserted into the body of the derived signal ([0033]), the position being determined according to the length of the header data of the derived signal and, when one or more regions precede the region header data concerned, according to one or more pointer markers TLM received previously and providing respectively the length of the preceding region or regions ([0052]); and inserting the received region header data at the determined position ([0045]).

26. As to claims 19 and 34, Boliek discloses the determination of the length of the part of the body of the derived signal preceding the data packet under consideration comprises a preliminary step of determining the order of appearance of the data packet in the body of the signal according to parameters relating to structure and organization of the data in the signal ([0045], and [0052]).

27. As to claims 20 and 35, Boliek discloses:

extracting from the derived signal the header data and data packets received ([0042]);

forming the header data of the valid signal from the header data extracted from the derived signal ([0050]);

concatenating the data packets extracted from the derived signal in the body of the valid signal ([0045]); and

when one or more data packets present in the body of the original signal are not received by the first apparatus, concatenating respectively one or more empty packets in the body of the valid signal in the same order of appearance as that adopted in the derived signal ([0042]-[0043]).

28. As to claims 21 and 36, Boliek discloses going through the data contained in the body of the derived signal ([0042]);

converting, when the data gone through do not correspond to a data packet received from the second apparatus, the space filled by the data concerned into an empty packet ([0042]); and

shifting in an adapted manner the data comprising the remainder of the body of the derived signal ([0050]).

29. As to claim 22, Boliek discloses the data received by the first apparatus

comprises the reply to a request previously transmitted from the first apparatus to the second apparatus ([0042]).

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30. As to claims 45 and 48, Boliek discloses a preliminary step of forming the derived compressed digital signal which thus comprises the header data and a signal body of length equal to that of the body of the original signal ([0033]), the body of the derived signal representing a space initially filled with arbitrary data and which is intended to contain the at least one data packet of the portion received from the second apparatus ([0045]).

31. As to claims 46, 47, 49, and 50, Boliek discloses the insertion into the body of the derived signal of the at least one data packet leads to overwriting part of the space initially filled with arbitrary data ([0045], received data is integrated with previously buffered data to form a codestream, i.e. received data is written into the memory of the client device, replacing any arbitrary data that was there previously).

Conclusion

32. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

33. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory

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action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

34. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Dailey whose telephone number is 571-270-1246. The examiner can normally be reached on Monday thru Friday; 9:00am - 5:00pm.

35. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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36. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. J. D./
Examiner, Art Unit 2452

/Dohm Chankong/
Primary Examiner, Art Unit 2452